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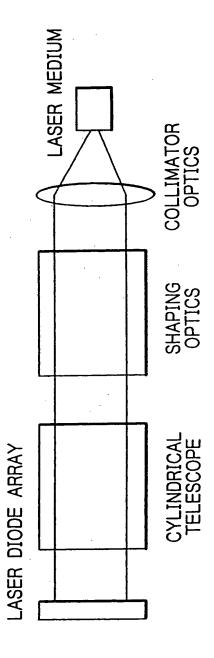
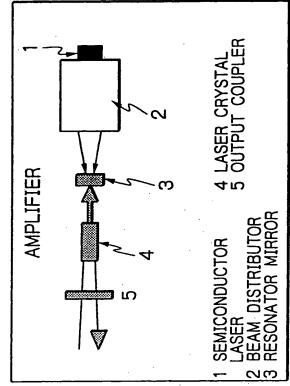


Fig. 1

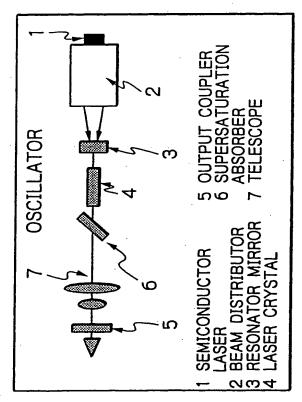
U.S. Serial No.: 09/903,732 Atty. Dkt. No.: 1458.0008 Inventor: Takashi Arisawa, et. al. ..e: SYSTEM FOR GENERATING HIGH-POWER SHORT-FOWER LASER

LIGHT Replacement Sheet





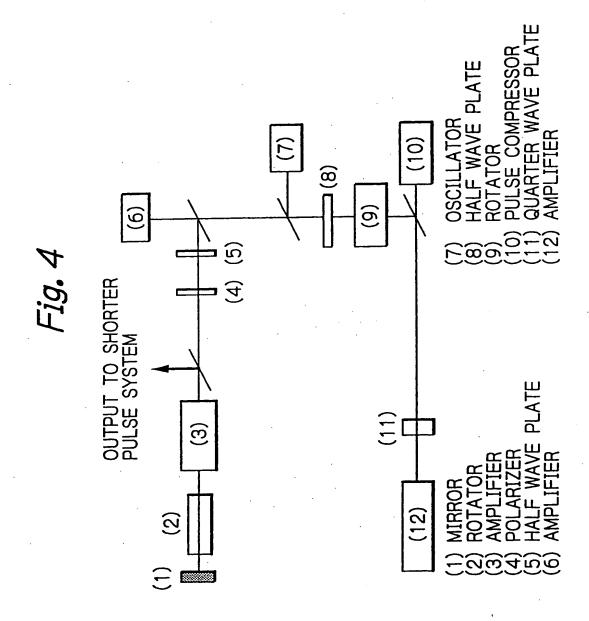




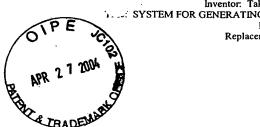
U.S. Serial No.: 09/903,732 Atty. Dkt. No.: 1458.00008.
Inventor: Takashi Arisawa, et. al.
SYSTEM FOR GENERATING HIGH-POWER SHORT-PO. _R LASER

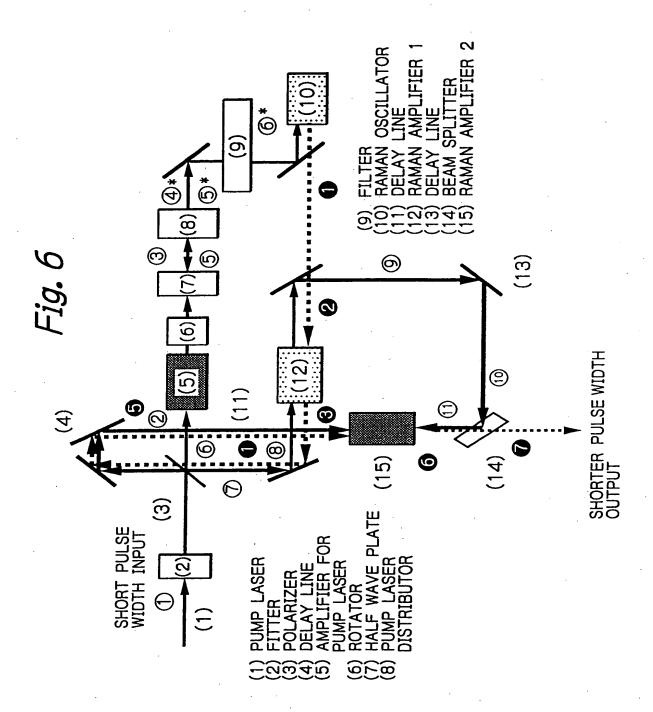
LIGHT Replacement Sheet





U.S. Serial No.: 09/903,732 Atty. Dkt. No.: 1458.00008 Inventor: Takashi Arisawa, et. al. SYSTEM FOR GENERATING HIGH-POWER SHORT-Power LASER LIGHT Replacement Sheet

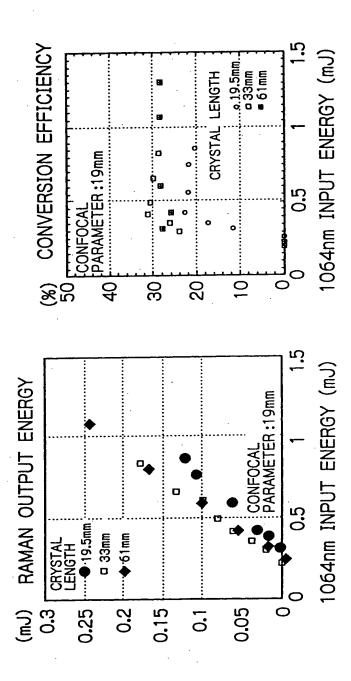




U.S. Serial No.: 09/903,732 Atty. Dkt. No.: 1458.00008 Inventor: Takashi Arisawa, et. al. .ie: SYSTEM FOR GENERATING HIGH-POWER SHOR1-. JWER LASER LIGHT

LIGHT Replacement Sheet





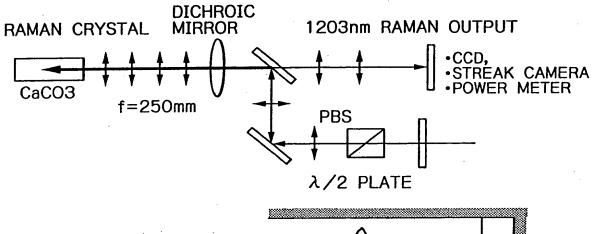
U.S. Serial No.: 09/903,732 Atty. Dkt. No.: 1458.00008
Inventor: Takashi Arisawa, et. al.
3YSTEM FOR GENERATING HIGH-POWER SHORT-PO. A LASER
LIGHT

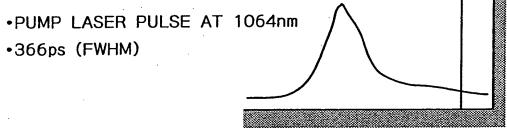


Replacement Sheet

Fig. 9

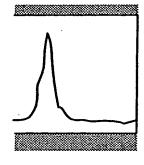
EXPERIMENTAL SYSTEM





- •RAMAN OSCILLATOR AT 1203nm
- •49ps (FWHM)

COMPRESSION: 7.5



U.S. Serial No.: 09/903,732 Atty. Dkt. No.: 1458.00008 Inventor: Takashi Arisawa, et. al. ING HIGH-POWER SHORT-. LIGHT cement Sheet SUB-mJ CLASS ENERGY H2-CLASS REPETITION RATE PULSE COMPRESSOR PULSE COMPRESSOR 10-mJ SHORT PULSE RAMAN LASER MASTER AMPLIFIER RAMAN AMPLIFYING/COMPRESSING LASER PULSE STRECHER SHORT-PULSE PUMP LASER TI: SAPPHIRE LASER Fig. 10B PRIORART YD FIBER LASER MODE LOCKED LASER PULSE EXTENDER MODE LOCKED LASER Fig. 10C PRIOR ART

HEEDRAMAN CRYSTAL OR SBS CELL

IIIIIIDIFFRACTION GRATING

FIBER

MINI SOLID STATE LASER

TI: SAPPHIRE LASER

☆☆☆NON LINEAR CRYSTAL

Fig. 10A

PRIOR ART

SEMICONDUCTOR LASER